AUSTRALIAN BLATTIDÆ.—Part II.

On the Type of Ischnoptera brunneonigra, Tepper, with a Description of the Male Insect.

By Eland Shaw, M.R.C.S., F.E.S., &c.

(*Read before the Field Naturalists' Club of Victoria, 11th Sept.*, 1916.)

In 1895 Mr. J. G. O. Tepper described this species from a ♀, and there is some doubt as to where his type is, as the National Museum, Melbourne, and the South Australian Museum, Adelaide, each regard their specimen as such.

The facts appear to be that in 1895 the National Museum, Melbourne, sent some Blattidæ to Mr. Tepper, of the South Australian Museum, for determination, and these, with the exception of some duplicates which he retained, were returned, with his labels attached, but in only one case (*Paratemnopteryx blattoides*, ♂), was the word "type" placed on any of the labels.

In his paper dealing with these specimens, in the *Trans. Roy. Soc. S. Aust.*, 1895, pp. 146–166, Mr. Tepper placed the words "Nat. Mus., Melb." after his description of each species of the Victorian collection, and the Melbourne Museum naturally asumed that he had in all cases used the returned specimens as his types. However, in 1915, after he had left the South Australian Museum, Mr. Tepper, at the request of the Museum, re-examined the whole of the species he had named, and marked the types and co-types as such; and amongst the Blattidæ he marked as his types five specimens originally included in those sent by the National Museum, Melbourne, and dealt with in his 1895 paper. These were :—

No. 20.—*Apolyta pallescens*, Tepp. (sex unstated).
No. 29.—*Apolyta marginata*, Tepp., ♂.
No. 44.—*Apolyta marginata*, Tepp., ♀.
No. 19.—*Ischnoptera brunneonigra*, Tepp., ♀.
No. 3.—*Choristima kershawi*, Tepp., ♀.

It is unfortunate that Mr. Tepper did not select his types at the time he described his species, and I think it possible that he originally regarded the Melbourne specimens as the types of these four species, but that a lapse of memory, after twenty years, brought about his marking the Adelaide specimens as such.

In his paper above referred to, Mr. Tepper, on p. 146, says, with reference to the Victorian collection :—"*The rare types of the latter are in the National Museum, Melbourne, when unique ; the remainder also represented in the S.A. Museum.*"

There is room for a difference of opinion as to his precise meaning, but I do not think he meant that some of the types were returned to Melbourne and some retained in Adelaide.

If he used all the specimens of each species before him in drawing up his description, then all such specimens were properly cotypes (*strictu sensu*), specimens equally historical with single types, and which should not be separated.

The matter should be cleared up without delay, and a definite pronouncement made as to where the types of these four species are. Perhaps the best course would be to assemble at one or other Museum all the specimens of each of these four species, and, if found in agreement with Mr. Tepper's descriptions, to regard them as *cotypes*, placing an additional label on each, clearly showing what has been done and when.

As regards *Ischnoptera brunneonigra*, Tepp., the Melbourne and the Adelaide specimens are both females. The male, which has never been described, I discovered at Healesville, in Victoria, and now append a description of it :—

Sub-Family—PSEUDOMOPINÆ.

Genus—Ischnoptera, Burm.

Ischnoptera brunneonigra (male). Female—Tepper, Trans. Roy. Soc. S. Aust., 1895, p. 155.

Head, with the vertex and frons, pale brown, terminal joints of the palpi paler. Eyes black. Antennæ brown, with the distal half of each joint paler, giving the antennæ an annulate appearance ; this is most marked in the proximal 6 or 8 joints, which are nitid, and not so densely ciliate as the distal joints. Pronotum trapezoidal, exposing the vertex ; sides deflexed, brown, shining, much darker laterally and posteriorly. Tegmina extending beyond the apex of the abdomen, brown, shining ; discoidal sectors 9, longitudinal, anterior one bifurcate ; costals 18. Wings hyaline, anterior portion infumate, veins brown ; the anterior radial vein bifurcate beyond the middle ; the posterior radial vein simple ; ulnar vein with one incomplete ramus towards the dividing vein, and four complete rami to the margin of the wing ; first axillary vein tri-ramose ; apical triangle inconspicuous. Abdominal tergites brown, shining, darker laterally and posteriorly ; first and seventh tergites with medial gland openings ; posterior margin of the sixth tergite arcuate. Supra-anal lamina dark brown, shining, produced, posterior margin prolonged into a rounded point. Sub-genital lamina brown, shining, ample, extending beyond the supra-anal lamina, somewhat asymmetrical, being fuller on the right side ; furnished with two broad-based conical styles, placed one medially and the other on the left side. Abdominal sternites brown, shining, with the lateral margins much darker than the disc. Legs pale brown, anterior femora on the anterior borders with four large spines occupying the middle third, succeeded

distally by a row of smaller spines. Formula of genicular spines, 0, 1, 1.

Length.—Body, 11 mm.; tegmen, 10.5 mm.

Cotypes, ♂, two in my collection.

Habitat.—Healesville, Victoria, Australia, Nov. and Dec., 1912.

The gland openings on the first and seventh abdominal tergites appear to be double, placed side by side, not single as in *Ischnoptera australis*, Sauss.

The description is drawn up from two cotypes, neither of the two specimens in my collection being perfect. They were captured from the insides of rather damp, rotting, fallen tree-trunks, the interiors of which were of almost the same colour as the insects.

Wynnum South, Queensland.

Exhibition of Wild-Flowers.—Notwithstanding the severe handicap of seven days' almost continual rain immediately preceding the date fixed, the exhibition of wild-flowers by members of the F.N.C., in the Melbourne Town Hall on 3rd October, in aid of the Y.M.C.A. National Appeal in connection with its war work, was an unqualified success. The exhibits were in abundance, the attendance splendid, and the monetary result will exceed all expectations. Details of the exhibition will appear in the next *Naturalist*.

The September Floods.—The heavy rainfall of September, 1916, in Melbourne amounting to the abnormal quantity of 793 points, will be long remembered by the floods which it caused, not only in the Yarra, but in many other streams throughout the State. In connection with natural history and the floods, the question arises what effect will they have on the fauna during the ensuing twelve months. Doubtless many snakes have been washed out of their winter retreats and drowned. Their loss is not regretted by most people, nor yet that of the rabbits which also lost their lives by drowning. But the question arises to the pond-life man, will he be able to find his favourite species in its accustomed haunts? It will be interesting to have reports from workers during the coming summer as to the distribution and prevalence of species in the various localities they are acquainted with, as compared with normal seasons. It seems hardly likely that after a favourite lagoon has been covered by twenty feet of water, for nearly a week in many cases, that the pond-life there will be as numerous or as varied as it was before. The question is one that might well be systematically investigated during the next few months.